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## LECTURES ON THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE LUNGS.

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### LECTURE XIII.—(*Continued.*)

#### PHTHISIS—TREATMENT.

THE treatment of phthisis is by many regarded as never curative, but merely as a means of palliating the most severe or harrassing symptoms of the disorder. If we apply the term consumption only to those cases in which the disease is far advanced, and the constitutional deterioration is extreme, it is very plain that no means of cure exist, and that even palliation is in many cases difficult; but if we speak of consumption as of other diseases which tend to a fatal termination only after having passed through their early and more curable stages, it is strictly curable, and, like these disorders, must be treated in different ways, according to the mode of its development; for as tubercles are attended with very different symptoms, and originate in various modes, it is very clear that the most opposite methods of treatment may prove efficacious in combatting the affection in its forming stage. But after the tuberculous deposit has fairly commenced, it obeys its own laws of growth, and presents the secondary symptoms, such as hectic fever, emaciation, &c., which are peculiar to itself, and then one uniform method of treatment is desirable, or at least seems indicated. Besides, although the modes of development of tuberculous disease are very numerous, there is a form in which the symptoms are regular and uniform; and even in those varieties in which the modes of origin are most unlike, there is a peculiar character impressed upon the various symptoms, which is dependent upon the serofulous or tuberculous diathesis.

This treatment would be specific for the disease, and would be curative if it could cause with certainty the absorption of the secreted product, and favour the cicatrization of cavities, when the loss of substance was not extremely great. If we possessed such a mode of treatment, we might then, with great confidence,

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expect to cure phthisis in nearly every stage. But as no such specific exists, we are obliged to content ourselves with the administration of alteratives, which have but a limited influence on the growth of tubercles, and of such remedies as act either upon the causes of the disease, or on the accidental disorders which favour the tuberculous deposit in an indirect way.

The alteratives used in phthisis are, for the most part, such as exercise a tonic and invigorating influence, at the same time that they produce their proper effect as alteratives. Mercury is always injurious as a direct remedy in phthisis; it can never be of service except in those cases in which there is decided inflammation, and the tubercles result directly from it; but even in this class of cases, the influence of the remedy is certainly injurious so far as it affects the proper tuberculous disorder, and it must be discontinued as soon as the inflammatory symptoms are removed. The effect of mercury in phthisis is now so well known that it has almost become an axiom in medicine to avoid it in the treatment of this disease. Iodine is much more used than any other alterative; and if employed with discretion, it scarcely ever does harm. I have found it beneficial at the commencement of cases in which the fever was but moderate, and the local inflammation but slight, especially when a circumscribed chronic bronchitis has preceded for a long time the actual development of tubercles. Hence it is well suited to those cases which are preceded by chronic inflammation of the trachea and larger tubes, and pass slowly into phthisis, and to the cases which are most closely connected with external serofulosa. The patient is then often robust in appearance, and the local disease is slow in forming. Iodine is also useful in the purely constitutional cases, provided it be given cautiously, and the emaciation of the patient has not advanced very far; it should then be combined with vegetable tonics. The preparation to which, from habit, I have restricted myself, is Lugol's solution, prepared of the strength directed in the United States Pharmacopœia,—that is, one scruple of iodine,

and two of hydriodate of potassa, to seven drachms of water. Of this I give to an adult from three to six drops two or three times daily; I scarcely ever exceed six drops three times daily, and often give much less. For the good effects of the medicine may be obtained much more certainly in this way than by giving it in larger, but more irritating doses. I have never witnessed any other mischievous effects from the iodine than the disorder of the digestive canal, and a fulness of the head which sometimes results from it, but it is very certain that in some rare cases it acts as other powerful alteratives occasionally do, and it may enfeeble or disturb the functions of the whole body without removing the morbid action. Hence it is advisable to discontinue its use from time to time, and resort to mild purgatives for a few days, or to abstain totally from all medicine until the tone of the stomach is restored; it then is scarcely possible that an injurious result should follow. As the action of iodine is slow, we cannot observe any immediate impression produced by it; but when it is acting well, the complexion and strength of the patient improve, and the cough at the same time gradually diminishes. The latter effects may be promoted by appropriate expectorants, which should be given at the same time with the iodine. The appetite and strength almost always increase; and if these fail, or become less, instead of increasing, it is almost a sure indication that the medicine is not acting well. It is often useful to administer laxatives from time to time, even if the medicine be not suspended. As iodine evidently acts merely as an alterative, it is beneficial in that condition of the economy which precedes the secretion of tubercles, as well as in their more advanced stages, and it may be conjoined with other alteratives, such as the compound decoction of sarsaparilla, or with mild tonics. Without attributing to iodine any specific virtue, I am quite convinced that its powers are very great in commencing phthisis, and that it often effectually arrests the progress of the disorder. The remedy seems to me to be least adapted to those cases in which tuberculization is very rapid, or the inflammation of the serous membranes very acute.

There is no other alterative of a medicinal kind to which I attach much importance. There is none to which I could refer as pos-

sessing enough certainty of action to make it useful in the majority of cases of phthisis: the mineral alteratives are more or less irritating and depressing in their effects; and the vegetable, although they are, in some cases, of service, cannot be relied upon with much certainty. They are evidently most beneficial where there is a constitutional deterioration which is going on very slowly, and rather precedes than actually accompanies the deposit of tubercles,—that is, it is the same disease which has not yet reached its highest point; and although the knowledge we possess of the virtues of this class of medicines is as yet extremely limited, there is great reason to believe that they may possess considerable power in arresting the early stages of constitutional phthisis. Most of the alteratives now used for this purpose are at the same time tonic, such as the preparations of sarsaparilla and the compounds of rhubarb with the bitter tonics, or with soda. In my own practice I resort to these remedies, chiefly to replace the iodine, or to aid its action.

When phthisis has fairly commenced, iodine, or any other alterative, is designed to favour the absorption of a product which is actually deposited. But there are many cases in which we know that a tuberculous action is going on; that is, that the process which ends in tuberculous secretion is actually at work. It is then important to arrest it in its forming stage, and iodine is often of benefit in these cases. It is true that direct proof of this is extremely difficult, because it is not easy to prove that a disease which is slow and obscure in its mode of formation, is really influenced or not by any remedy. The reasoning must be probable, and not demonstrative; and the truth is approached more or less nearly as the observer possesses the proper abilities for drawing conclusions of this kind. In these forming cases of tuberculous disease, iodine seems to act like alteratives of a hygienic character, and is certainly useful if no directly injurious consequences result from it; but it must be given in small doses, and from time to time should be intermittent. If these cases be very acute, the remedy must be omitted; for as a general rule it is quite unsuited to either the forming or the formed cases of acute phthisis or any other inflammatory form of tuberculous disorder. In these acute cases the inflammatory element predominates,

and the action of the remedy is too stimulating, as it is in cases of phthisis which begin by local inflammation. With these reservations as to its use, iodine is the most efficient remedy in early and in forming phthisis. How far its usefulness extends, is not a subject upon which we can speak with entire confidence.

In advanced cases of phthisis hectic supervenes; and iodine and all other alteratives are useless, unless they act merely as tonics. Indeed, iodine has generally appeared to me to be of positive injury as soon as softening had taken place. For even if its influence upon those portions of the lungs in which the disease has not advanced very far is good, it acts injuriously upon the surface of cavities and the softened tubercles.

In the early stages of tuberculous disease of the lungs, hygienic alteratives have always claimed the first place; indeed, you may readily believe that no medicinal alterative can well be useful if the hygienic measures which are best adapted for the disease be neglected. These are very well understood; and, besides the choice of proper localities for a residence, and for a journey or sea-voyage, consist mainly in adopting such precautions, and in pursuing such a course of life as is least fitted to develop the disease.

This part of our subject leads us naturally to the examination of some of the causes of phthisis. When we remember the circumstances under which the disorder occurs, we may divide them into two classes—those of a general and those of a local character. The general causes are such as exist originally in the individual, or arise from the circumstances in which he is placed; the latter are those which may be to a great extent obviated by art, and the action of the former may thus be checked indirectly, or at least not favoured. The local causes of phthisis are either directly inflammatory, or at least belong to morbid conditions which must be removed by medicinal rather than by hygienic measures. If the general causes include an hereditary predisposition to tuberculous disease, it is of course necessary to insist the more strongly upon those that are accidental. You find these causes enumerated in the work of Dr. Clark, and in most others upon the subject, and it is not necessary to enter much into detail upon this subject; some classification,

however, may be adopted, to render the same intelligible.

1. We may place hereditary predisposition in the first instance. This is universally admitted, and the strength of it is increased if the parents were actually labouring under the formed disease at, or a short time previously to the birth of the child. It may descend from either parent; but it would seem that the mother exercises the greatest influence in this respect, especially if she nurses the child herself. In other respects the usual laws of hereditary transmission hold good, and the probabilities of their action are increased if the child present the character of the scrofulous temperament.

2. Depressing causes which debilitate the powers of life, increase the tendency to the morbid action. These, of course, are very numerous. Imperfect diet, exclusion from light and fresh air, and mental depression, are amongst the most powerful. Inaction, or a diminished activity of body, favours the same result. These causes are very obvious in patients admitted into hospitals with other chronic diseases, and afterwards attacked by phthisis. The reverse of these causes is always to be advised, and whenever practicable the greatest attention should be paid to them. One of the advantages of a journey certainly arises from its invigorating influence, and the abundant supply of healthful air which is thus obtained for the patient. The depressing causes often arise from the effects of disease which is cured, but leave the patient in an enfeebled state: this is often the case with typhoid fever; in other instances it produces a more direct impression, and the phthisis supervenes before the fever entirely ceases.

3. Certain occupations are known by direct observation to favour the development of consumption; these are such as require a constrained position, and especially sedentary confinement in close rooms. Mineral or vegetable dust or powders diffused in the atmosphere contribute to the same result. Hence the propriety of changing a pursuit is often a matter of strict necessity. Irregular exposure to cold and heat has a similar tendency, but it is much more effective as a cause of the accidental inflammations that often precede phthisis.

Although these are the chief of the general causes of phthisis, the list might be much ex-

tended; they are, however, more or less analogous in their character, and are more or less directly depressing upon the individual.

The alterative effects of a long journey and of change of residence, are well known in phthisis. They both act nearly in the same way: a journey in a pleasant season of the year, or in a climate which renders all seasons agreeable, is often of great benefit in forming phthisis, or in those varieties of the disease in which there is not much febrile excitement or local inflammation; if these exist, the journey is irritating, instead of invigorating. If the strength of the patient is good, the journey should be made on horseback, or in an open carriage, and be pursued as long as the strength of the patient continues to improve. A sea-voyage is sometimes preferred to a land journey; as a general rule, however, it is less useful; but there are cases in which the strength of the patient is not great, but the disease at the same time is slightly advanced, and the fever moderate, in which a sea-voyage in a mild latitude is of great benefit. It is also of great benefit in those cases in which the phthisis is attended with slight, but frequent hæmoptysis during its early stages. A short voyage is of little comparative benefit; it should be long enough to act as a decided alterative; hence, one to the East Indies, or to the Mediterranean, or South America, answers best. The shorter voyages to Madeira, or the West Indies, are only advisable as necessary to a winter's residence in these climates.

The question of a change of residence is always of great interest to a phthisical patient; in fact, there is no one upon which he is more disposed to consult his medical adviser. The general anxiety felt by patients to resort to this mode of relief, is a conclusive proof that there is something in it, for it still continues when the lapse of years shows that the advantages of such a residence are excessively overrated. These advantages may be stated very briefly; by a winter's residence in a warm, but equable climate, the tendency to slight congestions or inflammations of various portions of the organs of respiration is obviated, and a cause of irritation is then removed. Secondly, the mildness of the climate allows the invalid to enjoy the advantages of fresh air and exercise without much discomfort or risk. Lastly, the change of climate and of air is of itself of great benefit

as an alterative. These advantages are, however, limited; they are not specific in the treatment of consumption; hence many cases are not at all relieved, some are even aggravated. If the disease be of the acute form, and especially if it be attended with much fever, the patient is almost always rendered more feverish by the journey, and the affection tends to advance more rapidly; or if the disorder be so much advanced that the strength of the patient is rapidly declining, no advantage can be expected. It is in the milder and more chronic cases that the change of air does good, especially if the patient has found by experience that the winter is of injury to the organs of respiration, and give rise to much cough or other signs of laryngeal or tracheal irritation. Of this class of patients very few individuals will be found to die abroad; most of them return with some benefit, especially for the first winter; if the disease be not arrested, however, the benefit of a second winter is very doubtful. When the disorder of the digestive organs is very prominent, the benefit from the voyage is very considerable, but that from a protracted residence in a warm climate is very doubtful.

The advantages resulting from a change of climate are not, therefore, such as to induce us to advise patients to leave their homes, and subject themselves to many privations without due consideration; and we should steadily oppose it, if the reasons for the voyage are not strong.

It is difficult to point out the precise spot which is most suitable for the winter residence of a consumptive patient. Many physicians differ with perfect good faith as to the relative advantages of the different places which they recommend. The island of Cuba, Santa Cruz, the West India islands in general, and Florida, are most in fashion with invalids from the United States. Madeira is much resorted to by those from England, and, to some extent, by Americans; and various parts of the South of France, of Italy, and the shores of the Mediterranean generally, are preferred by the continental nations. A full account of the various advantages of many different situations will be found in the work of Sir James Clark, to which I may refer you. My own advice is regulated very much by the peculiar circumstances of the patient, his willingness or his desire to undertake a distant sea-voyage, his pecuniary

means, &c. All of the different localities have some advantages; perhaps, at present, the island of Cuba offers more than any other. But it is not expedient to recommend any one situation to the exclusion of others,—still less is it expedient to advise a change of residence, even for a season, or a change of occupation, except upon strong grounds, and in cases where no harm at least will ensue.

#### ORIGINAL COMMUNICATION.

Williamsburg, (Va.,) Feb. 7, 1841.

To the Editors of the Medical Examiner.

Gentlemen,—It is my wish to make known to you a case of tubercular disease, which had an anomalous termination, and one to which I can find no parallel in authors. Its peculiarity may entitle it to a notice in your periodical. Perhaps your own experience, or your research, may furnish instances of like character.

The subject of the disease under consideration had for some time before her death manifested many of those symptoms which characterize the existence of a tendency to tubercular affections. It was pregnancy, which prevented its development at an earlier period. No sooner had parturition taken place, than the destructive malady presented many of its formidable features. Hectic fever and its train came on, with, however, no tangible evidences of the presence of pulmonary tubercles. The respiratory sounds manifested no other alteration than that which naturally occurred from the laboured and hurried movements of the pulmonary apparatus. Percussion betokened little or no change in the air-vesicles. Nevertheless, the praecordial distress, difficulty of respiration, general anxiety, and jactitation, were of the most strongly marked character. No relief was experienced from any remedy whatever.

Whence the origin of all this disturbance? The cause was readily perceived, when the ear was applied to the region of the heart. The first sound of this organ was nearly destroyed, so that it was scarcely distinguishable from the second cardiac tone. Dissection revealed that here was the source of all the distressing symptoms above mentioned. The tricuspid valve was almost obliterated by the presence of tubercular matter, which had matured and softened. The lungs contained a few tubercles in the first stage, and so scattered were they through the parenchyma of these organs, as to defy detection even by the most experienced auscultators. The peritoneum exhibited these bodies abundantly disseminated on its surface, and presented, more than any other part, evidences of that tubercular diathesis, which was so forcibly manifested during life. Death taking place before the disease had reached that period of its progress at which emaciation be-

comes one of the prominent symptoms, the body showed no marks of reduction, either externally or on dissection. It may, therefore, be noted as an instance of acute phthisis.

This case is very interesting in another point of view. It proves to us the presence of a peculiar morbid diathesis, designated as the tubercular, and capable of throwing the system into that state known as the hectic condition, even before any foreign bodies, as tubercles, exist in such a degree and such a stage, as to account for the peculiar disturbances suffered by the economy. It cannot be supposed that the destruction of one of the valves of the heart could have caused the characteristic symptoms of hectic, had this affection not been connected with the existence of tubercles, for the loss of a valve's functions would only be expressed by marks significant of the improper distribution of the blood.

The utility of auscultation was beautifully exemplified in this instance of pathology. As a science, even considered devoid of all practical importance, it taught the observer to form a correct diagnosis, and consequently enlightened him very much in his prognosis. But it was in this case likewise of practical moment, inasmuch as it pointed to the heart as the organ needing the assistance of remedial agents. If percussion and auscultation, together with an examination of the external chest, and a strict scrutiny of the movements of the thoracic viscera as manifested to the eye, were steadily pursued in every case where the diagnosis is difficult and doubtful, we should have fewer charges against medicine as a science, and much feebler opposition from empiricism.

I beg leave, gentlemen, to make two or three more remarks not altogether connected with the preceding observations. How much is it to be regretted that in the practice of our profession, plain, common sense, should not be more generally consulted than is now the custom! Disease is an unnatural condition of some organ or organs, and not an indefinable something, against which we must wage war with our drugs. When called to a case, let us sit down quietly by our patient, and endeavour first to ascertain *what organ* is affected,—and, secondly, *how* it is affected. This can only be done by appropriate and numerous questions; and he who makes up his prescription at the mere sight of his patient, as though divinely inspired, can deserve no title but that of empiric. Yet how frequently is it the case that the sick are scarcely interrogated; and if they are, it is not with that point and narrow investigation, which the health, and, as far as human agency is concerned, the existence, perhaps, of the confiding sufferer require. When this is done, when it is seen by the world that we do not strive to shroud our doings in a cloud of mystery, and move against disease with an array of dark incantations, then, and then only, can we hope to triumph over quackery, and free

our profession from a load of obloquy, which, it is feared, it now too well merits.

With great respect, your obedient servant,  
JOHN C. MERCER.

This case is very uncommon, so far as the disease of the tricuspid valve is concerned. The tendency to tuberculous disease, and the simultaneous deposit of granulations in the serous membranes and the lungs, are well known facts. It is only to be regretted that the author does not describe more fully the nature of the lesions of the tricuspid valve, and the condition of the rest of the heart, for it is not proven that the lesion of the valve is the cause of the absence of the first sound of the heart. The fever was undoubtedly the tuberculous fever which generally accompanies the formation of scattered granulations; we do not, however, regard this fever as precisely identical with the true hectic fever which occurs in the later periods of phthisis. It is the usual fever of acute phthisis; the peculiarity of the case is the disease of the tricuspid valve.—EDS.

#### BIBLIOGRAPHICAL NOTICES.

*History of Embalming, and of Preparations in Anatomy, Pathology, and Natural History, including an Account of a New Process for Embalming.* By J. N. GANNAL. Translated from the French, with Notes and Additions. By R. HARLAN, M. D. Philadelphia, 1840.

An interesting and valuable work—containing a history of the very ancient art of preserving animal matter, with an account of the modern improvements, and of a particular process of the author's. M. Gannal's method, which has received the sanction of a committee of the Academy of Medicine of Paris, consists in the employment of a salt of alumine,—the simple sulphate is the most easily prepared, and of moderate price.

"A kilogram of this salt, costing about twenty cents, dissolved in two quarts of water, is sufficient in winter to preserve a body fresh, by injection, for three months.

In order to preserve a body for a month or six weeks, it is not even necessary to inject the blood-vessels—a glyster of one quart, and the same quantity injected into the æsophagus, suffices for this limited preservation. This process is adopted at Clamart for all the dead bodies destined for dissection. The preservative power of this salt will be easily understood, if

its analysis be compared with that of the double sulphate given above.

One hundred parts of simple sulphate of alumine, are composed of alumine 30, of sulphuric acid 70. This salt properly prepared, exempt from iron, commonly contains from thirty-six to forty for 0° of water.

The following is a table of the different densities of this salt, according to the quantity of water in which it is dissolved.

A kilogram dissolved in five hundred scruples of water gives a quart of liquor which marks 32° on the areometer of Baumé.

This same quantity in a quart of water

Marks,	20°
In two quarts,	17°
In four quarts,	8°
In five quarts,	6°

This table is important, as it gives the composition of the different liquids of which we shall see the application.

The liquid of injection, of which we have indicated the preparation and the quantity, is sufficient during winter and moderate temperatures; but when it passes 20° it ought to be more abundant, or the solution more concentrated.

When it is intended to preserve the body for a longer period, it is necessary to neutralize the sulphuric acid, which is taken up by the addition of acetate of lead. Two hundred and fifty scruples of this salt for one kilogram of the dry sulphate produces the desired effect. If the preservation is to be indefinitely prolonged, the use of the acetate of lead will have a tendency at length to blacken the epidermis. Indeed, as it is impossible to cause all the lead to disappear, the small quantity of this salt remaining in the liquid will be then decomposed by the hydro-sulphuric acid disengaged by the corpse, or rather by the sulphur which it contains, and the salt of lead is changed into sulphuret, a black insoluble powder, giving to the body all the exterior aspect of the negro."

M. Gannal's work, we need hardly say, is of great importance to the practical student of anatomy, and has interest for the general professional reader.

*A visit to thirteen Asylums for the Insane in Europe; to which are added a brief notice of similar institutions in transatlantic countries, and in the United States, and an Essay on the causes, duration, termination, and moral treatment of Insanity. With copious statistics.* By PLINY EARLE, M. D., Resident Physician of Friends' Asylum for the Insane, Frankford, near Philadelphia, Pa., &c., &c. Philadelphia, 1841.

The main portion of this pamphlet has already appeared in the American Journal of the

Medical Sciences. The author has appended to his account of the thirteen European asylums which he personally visited, such notices of others (both American and European) as he could collect from various sources, and has incorporated with the whole an essay on Insanity. The increasing interest which the subject of insanity is just now arresting in the United States, and particularly in our own immediate community, makes this pamphlet particularly well-timed; the author's remarks on the treatment of insanity are judicious, and evince familiarity with the best authorities.

It is now conceded (he says) by all who are best acquainted with the management of the insane, that the first element in their moral treatment is their removal from acquaintances and former associations. One prominent advantage in such removal is the promotion of the second element of treatment, that of withdrawing the mind from its hallucinations, and attracting it into a new current of thought. For the full accomplishment, however, of this latter object, after the removal to a suitable place has been made, the almost unremitting attention of judicious care-takers is required. New objects must be presented to the view, new incentives to the mind, and no expedient which would be likely to attract the attention and divert the thoughts must be left untried. Hence, in those institutions for the treatment of this disease which have recently been established, as well as those older establishments which have kept pace with the progress of knowledge, manual labour, in many of its forms, amusements, and sources of literary and scientific entertainment and instruction, have been introduced among the patients. In short, instead of being degraded to a level not only with criminals, but with the brute creation, and consequently shut out from association with mankind, and placed beyond the influence of kindness and of sympathy, the insane are now treated as intelligent and immortal beings, the affections and sympathies of whose hearts are still alive to the influences which operate upon those of mankind in general.

**Labour.**—“We have seen,” says one of the reports of the M'Lean Asylum, Massachusetts “the very best results from labour. Patients who, without it, were noisy and troublesome, have become quiet with it. One patient, who was brought to the institution in irons, and who, until employed, was constantly raving and excited, when furnished with occupation became quiet.” At the Massachusetts State Lunatic Hospital, in 1839, no less than one hundred and seventy-nine patients were employed in manual labor. The superintendent of that institution says, in his seventh report: “Of the benefit of labour, both for the curable

and incurable insane, we have been long impressed. It promotes health, induces sleep, favours self-control, satisfies the individual of the confidence reposed in him by the officers of the institution, and produces quiet and contentment.”

At the Pennsylvania Hospital, the Asylums at Frankford, New York, and Hartford, and at the state institutions of Maine, Vermont, Maryland, Virginia, and Ohio, the patients are induced to labour; and testimonies in favour of the utility of the practice might be adduced from nearly all of them.

In Europe similar sentiments prevail. “As employment,” says Sir Andrew Halliday, speaking of the patients of the Armagh Asylum, Ireland, “is now generally allowed to be the best restorative, every means has been used to promote it. Such as are at all capable among the females are constantly employed in plain work, spinning, &c.; and the division in which this is going on is remarkable for its regularity and cheerfulness.” At the Middlesex County Lunatic Asylum, at Hanwell, England, in 1837, of six hundred patients, more than four hundred were constantly engaged in some useful occupation.

In reference to this element of moral treatment, Samuel Tuke remarks, “The employment should, as far as it is practicable, be adapted to their (the patients') previous habits, inclinations, and capacities.” He prefers that in which the individuals will excel, and the useful rather than amusing, as affording to the patient “a calm feeling of satisfaction.” “It is related,” says the same author, “of an institution in Spain, which accommodated all ranks, and in which the lower classes were usually employed, that a great proportion of these recovered, while the number of grandes (that recovered) was exceedingly small.”

M. Brierre de Boismont, in a recent work, speaking of the patients at the Bicêtre, Paris, says, “The convalescent maniacs have this year excavated large quantities of earth; they have engaged with pleasure in farming, and have kept a laundry in operation. More than one hundred and fifty of them are employed in throwing up terraces, in masonry, gardening, the manufacture of locks, making plaster, cabinet-making, and carpentry.” Dr. Ferrus, who has long had the medical charge of the patients in the Bicêtre, in speaking of labour, says, “I have made, myself, on a large scale, a happy experiment of its efficacy as a means of both discipline and cure. The recoveries have been more rapid, and the relapses more rare.” Similar testimony might be adduced from the Asylum of Sonnenstein in Prussia, from those of Turin and Milan, in Italy, and from various institutions of the kind in France and Great Britain.

It is a remarkable fact, that, although farming implements and edged tools have, for many years, been entrusted to the insane, there is

not a single instance on record of any serious injury having arisen therefrom.

*Amusements.*—It is universally acknowledged that suitable amusements are efficacious adjuvants in restoring the excited and deluded minds of the insane to their healthy standard of calmness and accuracy of perception. Hence, in nearly every asylum, whether foreign or domestic, the means are furnished by which the patients may engage in a diversity of games. Entertainment is afforded by an occasional tea-party or dancing party, and the means of intellectual gratification and instruction are supplied by books, newspapers, and magazines. Those patients who have a particular taste or predilection for any special science, or in whom such taste can be awakened, ought to be supplied with the means of pursuing it. At the Frankford Asylum, during the past year, a gentleman who had been several months under medical treatment, became, by an incidental circumstance, interested in botany. He immediately commenced the study of it, devoting himself with the most untiring assiduity to the pursuit. Books, and a microscope to facilitate in the analysis of flowers, were furnished him, and he was permitted to ramble alone through the woods and fields for the purpose of collecting specimens. He improved very rapidly in both physical and mental health, and soon returned to his home perfectly restored.

Music has been tried as a curative means in many Asylums. We should suppose, *a priori*, that it might be attended with beneficial results. In order, however, that this should obtain, it must be managed with a most discriminating judgment. It must be adapted to each patient, according as he is depressed or exalted; otherwise, the melancholy in the former case might be augmented, and the exaltation, in the latter, increased to fury. Esquirol, whose experience in this respect is undoubtedly greater than that of any other person now living, remarks, “I have tried it (music) in every manner, and under circumstances the most favourable to success. Sometimes it has irritated the patient even to fury; often it has tended to divert the attention, but I cannot say that it has contributed to a cure. It has been advantageous to the convalescent.” \* \* \*

“Having made so many partial applications of music, I was desirous of attempting it upon many persons, simultaneously. My experiments were made during the summer of 1824, and that of 1825. Many distinguished musicians of the capital, seconded by the students of the Conservatory of Music, assembled at our Asylum (*La Salpêtrière*) many Sabbath-days in succession. The harp, the piano, the violin, some wind instruments, and some excellent voices, combined to render our concert as agreeable as interesting.

“Eighty insane women, chosen by me from the convalescents, the maniacs, the tranquil

monomaniacs, and some hypomaniacs, were commodiously seated, facing the musicians, in the dormitory of the convalescents. \* \* \*

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Since the foregoing remarks were written, a treatise upon Insanity has appeared in Paris, the object of which is "to establish the truth of the following three propositions:—

1. If it be true that insanity depends on an alteration, or morbid condition of the encephalon, we are completely ignorant in what this alteration consists.

2. The moral treatment of the insane, as usually practised, is considered only as an auxiliary of the physical treatment.

3. In the insane, the intellect and passions cannot be brought back to their healthy type, or standard, without the aid of moral treatment; and this mode of treatment is the only one which has a direct influence on the symptoms of insanity."\*

The author of this work is a highly intellectual and scientific physician, and his experience in the treatment of the insane has been very extensive; hence his opinions merit attention and respect. Those best acquainted with mental diseases, and with their present mode of treatment, will acknowledge an affirmative to the two first propositions, even without an investigation of the arguments adduced in the demonstration of the truth of them. But, it is believed that the same assent cannot be granted to the sentiment of the latter clause of the third proposition. Insanity is far from being an invariably idiopathic disease of the encephalon; it is frequently symptomatic of affections of the other viscera. Now, we would ask, what is that moral treatment, so potent in its influence as to correct the morbid conditions of the portal circle, or restore the dyspeptic stomach to its normal state? It is to be feared that this author has fallen into the extreme alluded to above.

*Attendants.*—How perfect soever may be an asylum in its organization and administration, how complete soever it may be in all the physical comforts which wealth may purchase or ingenuity invent, how diverse soever the means of recreation and amusement—the great object for which these have been furnished, that of effecting a cure in the patients, will be tardily, if indeed it be ever accomplished, unless the attendants, those who have the immediate care of those patients, are of a suitable character. Complete dominion over the passions, a well-cultivated mind, unyielding firmness, untiring energy, and an ever-watchful vigilance, united with mildness, gentleness, an affable and respectful deportment, and a benevolent, sympathising, Christian mind, are necessary to constitute the perfect attendant. The nearer this standard be approached, the better will be the care extended to the patients, and the more rapid will be the cures. "We will not," says one of the reports of the M'Lean Asylum, "continue any male attendant, whom we cannot invite into our family, and seat at our table; and with whom we could not confidently place our wives, sisters, and brothers." The rule that immediate dismissal shall be the penalty of striking a patient, is adopted in most asylums, and should be in all. Could the standard which we have mentioned be reached, perhaps no such rule would be necessary.

*Coercion and Punishment.*—The strait-jacket, manacles, and chains have nearly been abandoned in the best institutions of the treatment of lunatics. The first, however, is still used occasionally in some of the British Asylums, and is not entirely abandoned in some of those of the United States. A change of location, the deprivation of a privilege, the shower-bath, and other punishments comparatively mild, are often sufficiently effective. The "tranquillizing chair," and mits and muffs, are still employed occasionally in nearly all asylums. In the Connecticut Retreat, as says one of the reports of that institution, "in case coercion and confinement become necessary, it is impressed upon his (the patient's) mind, that this is not done for the purpose of punishment, but for his own safety and that of his keepers." "In no case," says the same report, "is deception of the patient employed or allowed; on the contrary, the greatest frankness, as well as kindness, forms a part of the moral treatment. His case is explained to him, and he is made to understand, as far as possible, the reasons why the treatment to which he is subjected has become necessary. By this course of intellectual management, it has been found, as a matter of experience, at our institution, that patients who had always been raving when confined without being told the reason, and refractory when commanded, instead of being entreated, soon became peaceful and docile." Sir A. Halliday insists upon the necessity of honourable and candid dealing with the insane, and

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not a single instance on record of any serious injury having arisen therefrom.

*Amusements.*—It is universally acknowledged that suitable amusements are efficacious adjuvants in restoring the excited and deluded minds of the insane to their healthy standard of calmness and accuracy of perception. Hence, in nearly every asylum, whether foreign or domestic, the means are furnished by which the patients may engage in a diversity of games. Entertainment is afforded by an occasional tea-party or dancing party, and the means of intellectual gratification and instruction are supplied by books, newspapers, and magazines. Those patients who have a particular taste or predilection for any special science, or in whom such taste can be awakened, ought to be supplied with the means of pursuing it. At the Frankford Asylum, during the past year, a gentleman who had been several months under medical treatment, became, by an incidental circumstance, interested in botany. He immediately commenced the study of it, devoting himself with the most untiring assiduity to the pursuit. Books, and a microscope to facilitate in the analysis of flowers, were furnished him, and he was permitted to ramble alone through the woods and fields for the purpose of collecting specimens. He improved very rapidly in both physical and mental health, and soon returned to his home perfectly restored.

Music has been tried as a curative means in many Asylums. We should suppose, *a priori*, that it might be attended with beneficial results. In order, however, that this should obtain, it must be managed with a most discriminating judgment. It must be adapted to each patient, according as he is depressed or exalted; otherwise, the melancholy in the former case might be augmented, and the exaltation, in the latter, increased to fury. Esquirol, whose experience in this respect is undoubtedly greater than that of any other person now living, remarks, "I have tried it (music) in every manner, and under circumstances the most favourable to success. Sometimes it has irritated the patient even to fury; often it has tended to divert the attention, but I cannot say that it has contributed to a cure. It has been advantageous to the convalescent." \* \* \*

"Having made so many partial applications of music, I was desirous of attempting it upon many persons, simultaneously. My experiments were made during the summer of 1824, and that of 1825. Many distinguished musicians of the capital, seconded by the students of the Conservatory of Music, assembled at our Asylum (*La Salpêtrière*) many Sabbath-days in succession. The harp, the piano, the violin, some wind instruments, and some excellent voices, combined to render our concert as agreeable as interesting.

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urges the importance of the fact, that they are generally, if not universally, affected by kindness, while they never forget injuries, insults, duplicity, or imposition. An appeal to the sympathies of the most maniacal patients, while, at the same time, a negative assent is given to their particular hallucination, is sometimes more effective than punishment. An interesting instance of this kind is related by the late Dr. Rush, of a lunatic in the Pennsylvania Hospital. This patient having frequently attempted to set fire to the building, was expostulated with by one of the managers, who endeavoured to impress upon his mind the effects of a conflagration, such as he had attempted. "But I am a salamander," said he. "Recollect, however," answered the gentleman expostulating with him, "that all the patients in the hospital are not salamanders." This sagacious reply had the desired effect; the patient desisted from his incendiary attempts.

## DOMESTIC.

## HEALTH OF THE CITY.

INTERMENTS in the City and Liberties of Philadelphia, from the 3d to the 10th of April,

Diseases.	Adults.	Children.	Diseases.	Adults.	Children.
Asthma,	1	0	Brought forward,	42	43
Amennorrhœa,	1	0	Intemperance and		
Casualty,	1	0	exposure,	3	0
Congestion of the lungs,	0	1	Marasmus,	0	1
— brain,	0	1	Measles,	0	5
Consumption of the lungs,	22	5	Mania a Potu,	1	0
Convulsions,	0	5	Old age,	4	0
Constipation,	1	0	Obstruction of bowels,	0	1
Dropsy,	1	0	Pleurisy,	1	0
— abdominal,	1	0	Scirrhous of liver,	1	0
— head,	0	3	Small pox,	1	3
— breast,	1	0	Still-born,	0	8
Disease of brain,	1	0	Ulceration of throat,	1	0
— heart,	2	0	Unknown,	3	0
— lungs,	0	1	Varioloid,	0	1
— hip-joint,	0	1	Total,	119	57
Dysentery,	0	1		62	
Debility,	0	8			
Erysipelas,	2	0	Of the above, there		
Fever,	0	1	were under 1 year	28	
— scarlet,	0	1	From 1 to 2	9	
— typhus,	2	0	2 to 5	13	
Hooping cough,	0	2	5 to 10	7	
Intestinal irritation,	0	1	10 to 15	2	
Inflammation of the brain,	0	2	15 to 20	3	
— bronchi,	1	3	20 to 30	10	
— lungs,	3	5	30 to 40	17	
— bowels,	1	1	40 to 50	7	
— heart,	1	0	50 to 60	7	
— uterus,	0	1	60 to 70	7	
			70 to 80	6	
			80 to 90	3	
Carried forward,	42	43	Total,		

In the above are included 17 people of colour, 6 interments from the alms-house, and 1 from the country.

*Cases of Thymic Asthma.*—S. P. W. aged sixteen months. Soon after birth, before the child was dressed, he had a cough, which was repeated occasionally, during the rest of his life. It was noticed less, perhaps, during the last few months. In April last, when five and a half months old, he appeared rather delicate and feeble. He appeared to increase in length, but remained stationary in flesh.

When eight months old he was attacked with spasms at midnight. His mother was awoke with a noise resembling a hiccup.— When taken up, he appeared like a child partly insensible. There was laboured respiration, and stiffness of the extremities, with lividness of the lips and nose, and the eyes were fixed. The paroxysm passed off in about two minutes, and left him with a twitching of the extremities, which lasted about five minutes. These paroxysms returned twice with the interval of a week. The last one was the least severe.

When nine months old, while travelling, he appeared to have taken cold; and at Pittsfield, Mass., they supposed his symptoms to be those of pneumonia. His attending physician, Dr. Root, administered powders composed of calomel and ipecac, and applied a blister plaster to the chest. This treatment had a favourable effect, and he was soon relieved.

From that time, until he was fourteen and a half months old, he appeared well and grew rapidly, notwithstanding he never had teeth. He was not able to walk without assistance, which was attributed to a weakness of the limbs.

When fourteen and a half months old, he was attacked with convulsions attended with spasms of the muscles of the face and eyes, frothing of the mouth, and sickness of the stomach. The next day there were symptoms of bronchitis, and a slight catching of the breath, of an asthmatic character, which had troubled him also from the sixth to the tenth month of his age. This catching of the breath appeared to be relieved by the treatment at Pittsfield.— The two following days he had a return of convulsions which were not so severe as the first.

These convulsions were followed by cough and frequent respiration, which were relieved by calomel and ipecac, an enema, and a blister plaster to the chest.

From that time until the week before his death, he appeared perfectly well, except that a few days before his death the catching of the breath returned.

Five days previous, he appeared to have lost his breath entirely, and became very dark coloured in the face. When the breathing returned he evinced distress by crying.

Four days previous, he had a convulsion, preceded by the catching of the breath. At the

time of his death this "catching of the breath" appeared, while amusing himself with his playthings, and he expired in three minutes.

*Post-mortem examination* was conducted by Dr. A. C. Post, about seven hours after death. Body well formed and developed. On raising the sternum, the thymus gland was brought into view, appearing at first, rather under the natural size at birth, being about one and a half inches in length. But on more careful examination, this was found to be but a kind of appendix to, or prolongation of, the true body of the gland, which was situated higher up upon the anterior portion of the trachea: it was two and a half inches long and one and a half broad, and about half an inch at its thickest part.—The right cornu was natural, but the left extended upwards by a worm-like process, quite to the angle of the jaw, and terminated in a bulb as large as the end of the little finger. It lay directly upon the track of the great vessels passing down the neck. The vena innominata also lay enclosed between the body of the gland and the lower prolongation, or lobe;—but the par vagum of the phrenic nerves were not implicated by the tumour. The whole length of the gland when removed from its attachments was six inches. There was no enlargement of the lymphatic glands of the neck.—The heart was generally enlarged. Both sides; especially the auricles, as also the great vessels, were considerably distended by very dark and fluid blood. The mucous glands about the pharynx and root of the tongue were enlarged.

The larynx, trachea, bronchi and lungs were perfectly healthy; no hypostatic congestion.

*A case of enlargement of the thymus gland, occurring in a child nineteen months old, and terminating fatally in nine days.—ISAIAH HARRIS, aged 19 months, a light mulatto, was attacked on Thursday, the 18th Feb., with fever. When I saw him a day or two afterwards, he had a hot skin, a loaded tongue, a frequent pulse, quick breathing, and green stools; he was rather hoarse, and had a short, stifled, harsh cough. From his excessive peevishness it was impossible to auscultate the chest. On the cheeks were clusters of reddish papule, and all over the body a fine granular eruption without redness, and resembling the whitish points seen upon the skin in scarlatina. In a day or two, a gland on each side of the neck swelled and became painful. In this condition he continued, always wakeful and peevish, with slight fever, but nursing freely until the day before his death. On the morning of that day he had less fever, and his look was brighter; at night his fever increased.—The eruption had disappeared. He slept throughout the night unusually well, snoring loudly, until about 3 A. M., when he became restless. At 5 A. M. he began to breath badly, and at 9 A. M. his breathing was high and*

laborious, with mucous rattle, and he had no pulse; of this near approach of sinking, there had appeared no evidence the evening before. The chest sounded well on percussion. He lingered in this state until half past 4 P. M. and died without convulsions.

An elder sister and brother were sick at the same time. The former had very similar symptoms, and a similar eruption of the skin, but no cough. The boy had a regular attack of scarlatina, with slight sore throat.

*Autopsy.*—The body rather fat. The lungs were quite healthy, of a pale pink colour, crepitant throughout, and no serosity flowed from the divided extremities of the bronchi on squeezing them; on the lower lobe on the left lung was a purplish discolouration; and on incising it, a superficial degree of congestion existed for about a line in depth. The trachea was pale, but there was a slight degree of redness between the rings of the larger bronchi. I neglected to observe whether this was continued along the smaller ramifications. The thymus gland was enlarged. Its two cornua ascended up on the trachea to the distance of an inch above its bifurcation, lying in contact and completely covering it. The whole length of the cornua to where the gland begins to expand is an inch and a half, and the innominata artery is overlapped by them. The gland completely overlaps the heart, reaching to within one fourth of an inch of its apex, being two and one tenth inches at its widest part, and its whole length, including the cornua, four inches and a half. It adheres as usual, loosely to the pericardium. The heart is small; the walls of the left ventricle rather thick. The thymus, as is usual, is divided by a salcens into two lobes, of which the left is much the largest, being one and a quarter inches in width, and two and a half in length; the right, three fourths of an inch broad and two inches long. Its weight after immersion in spirit, 175 grains. The mucous membrane of the intestines was tumid, not vascular, every where easily removed by the nail or scalpel, and in some places partially removed by absorption. Several of Brunner's glands were in a state of considerable hypertrophy.

The symptoms, in this case, presented nothing attributable to the state of the thymus gland, nor do I learn that during life, he was subject to any attack of a spasmodic character. It is the sixth which I have witnessed; of these, four have already been published; the fifth will appear through another channel. Dr. Swett informs me that he has recently assisted at another post-mortem examination, in which enlargement of the thymus gland co-existed with slight broncho-pneumonia, which, with the case seen by Dr. Clements, makes eight cases of the disease met with in this city within a few years; a sufficient proof of the necessity for a more attentive examination of this interesting subject. It seems evident that

children labouring under this congenital malformation, are, if they do not die suddenly, exceedingly liable to perish on the supervention of any slight degree of vascular excitement in their systems, by whatever cause induced. I would particularly remark that the patient did not die with the symptoms of cerebral disease; and that there did not exist disease enough within the chest to have caused death, unless the thymus gland be allowed to have exercised some agency.—*New York Hospital Reports, in N. Y. Journ. of Med. and Surg.*

*Case of Thymic Asthma.* By Dr. BLISS.—On the 12th of March, a female infant, aged six months, while playing with an attendant, who held it in her arms, suddenly threw the head back. The eyes became fixed, countenance livid, the extremities extended, rigid, and affected with a slight tremulous motion; which symptoms were followed with almost instant extinction of life.

About a month previous, I had been requested to visit the child, who had suffered two paroxysms similar to that which was the immediate cause of death: one of which occurred the evening previous, and the other on the morning of the day I was requested to visit her. At this time she was affected with a deranged state of the bowels, frequent green watery stools, and she also had slight bronchial inflammation. These symptoms were relieved by remedies in the course of three or four days, and with the exception of an occasional slight cough and the recurrence in one instance of the symptoms above described, in which the countenance was remarkably livid, the mother represents the child to have been in apparent good health up to the moment of its death.

The circumstances of the case were such, as to induce me to solicit permission to examine the body; and Dr. Buck, at my request, made a dissection, the result of which, as furnished by his notes, is as follows:

*Dissection.*—The thymus gland measured four inches in length, and three in breadth, and consisted of a broad expanded portion below, that spread out over the heart, leaving only its apex uncovered. It adhered closely to the pericardium, and extended on either side to the roots of the lungs; its greatest thickness was three-fourths of an inch in the middle, at the edges it was thin and sharp. This portion sent a slender prolongation upwards as high as the inferior edge of the cricoid cartilage, that adhered by loose cellular tissues to the trachea and great vessels of the heart, and terminated in two, pointed, diverging crura that embraced the sides of the trachea. The substance of the gland was of the colour of the pancreas, and at its thickest part was of the same consistence. The mucous membrane lining the larynx and trachea was pale and healthy. The lungs were quite firm, and crepitated but little; their substance was red, tough, and exuded but little

fluid. The heart was not examined. A small extent of the transverse colon was opened and found thickly scattered with swollen isolated glands.—*Ibid.*

## FOREIGN.

### INQUESTS IN MIDDLESEX, HELD BEFORE MR. WAKLEY, M. P.

*Alleged Deaths from Excessive Blood-letting by Venesection.*

*Case I.*—John Shears, a robust, florid-looking man, aged forty-three years, died on the 23d of November, 1840; and his widow complained to the constable of St. Marylebone, that the cause of his death was excessive bleeding from the arm on November 21st, under the treatment of an inexperienced practitioner, who had seen him soon after he had fallen in a fit, in a shop where he was working as a carpenter. The allegation, upon some preliminary inquiry, was found not to be groundless, and the warrant for an inquest to be held on the body, in Great Titchfield street, on the 26th of November, was issued, when

Joseph Sawtell stated that the deceased seemed perfectly well on that morning, until, just after beginning to work, his employer, Mr. Clark, observing that he was proceeding unsatisfactorily about it, told him to "gather up his tools and go home, for he had engaged him as a good workman, whereas he saw that he knew nothing about his business, and was no carpenter at all." On receiving half-a-crown for his wages, deceased said it was not enough; and while Mr. Clark was in the act of tendering him a shilling more, he turned pale and fell, speechless, and insensible for a time, breathing heavily until his neckerchief was loosened. In falling, his head struck the edge of a door, and received a deep wound, three inches long, from which blood enough flowed to soak through a thick mat on the floor. He was picked up, and subsequently carried home, a short distance only, in a chair; the wound open. Before leaving the shop he slightly recovered from the shock, and expressed much agony at some pain, now and then putting his hand to his head.

His wife sent for a "doctor" at once, and in twenty minutes one arrived from a shop which had no name over the door. Expressions of agony (or convulsive motions) were continued by the deceased, who was then abruptly asked "how he was," with the addition that he "must have been drinking again." His pulse was felt, and preparations made for venesection; and tape and a wash-hand basin were supplied for the operation, as the patient sat on the edge of the bed, whence he presently sank to the floor, from the impossibility of holding him up, on account of his writhings, though supported on each side by the policemen who had brought him in, and, sitting on the floor, the bleeding was performed, in the left arm.

Thomas Key, a police-constable, being sworn, testified to the latter of the above facts. His fellow-constable held the basin, which, before the bleeding ceased, was nearly three-fourths full.

The coroner here questioned the witness closely as to the amount, and, in order to enable a better judgment to be formed of the quantity that the witness considered was taken, a basin, similar to the one used, and two quarts, by measure, of porter, were brought into court, and the witness was directed to pour into the former, with exactitude, so much of the fluid as he could swear did not exceed the amount of blood received into the basin. The witness having transferred as much as measured three pints and a half, paused; not, he said, because that was quite enough, but because he would rather underrate the quantity; and he justified his statement by saying, that when the operation was ended, the blood in the basin washed the end of the thumb of the other policeman, as he gently moved it away. And he added, that, besides that blood, at least half a pint was spilled on the carpet, for it soaked over a surface a yard in diameter. The stream of blood stopped by becoming weak, and deceased, by that time, was excessively feeble. The arm was then tied up by the doctor, and deceased lifted into the bed. Witness was quite certain that no water was in the basin when the bleeding was begun. He stayed with deceased until twenty-five minutes past nine o'clock that morning.

Police-constable 111 E was called in to verify or contradict these statements. He asserted their truth.

The landlady of the house, who was in attendance in the bed-room, as well as the wife, was also sworn. She thought that about three and a fifth pints of blood were taken, besides what was spilled on the floor. The bleeding, she calculated, occupied twenty minutes. The bandage, also, got loose in bed, and some blood, not much, was lost there before its escape was discovered. He had convulsions on Saturday, after which he lay nearly still, occasionally moving his head. On Sunday he was more exhausted and quiet. In the evening he was still feebler, and on Monday afternoon, at ten minutes to one, without having once recovered his sensibility of surrounding objects, he died. He was naturally a high-coloured man in the face; after the bleeding he was very pale, but the colour returned during the convulsive fits.

The coroner here said, that however extraordinary the evidence might appear,—and the witnesses spoke positively, and without hesitation,—he could not allow the inquest to proceed until an examination had been made of the body, to ascertain what effects were to be ascribed to the loss of blood, and what to the extravasation in the brain, which the fall in the shop indicated, especially since he had learned that a fortnight before his death he had had an

epileptic fit.\* He was informed, also, that Mr. Wotton, a surgeon, had subsequently been called in to see the patient; he should, therefore, issue an order to that gentleman to examine the body, and then a history of the symptoms could be given by the same person as had ascertained the proximate cause of death. The practitioner who had bled the patient was at present arraigned. The constable, therefore, had been desired to request his attendance at the delivery of the evidence; and he should, also, together with any medical friend whom he might select, be informed when the examination was to be made, that he might have an opportunity of witnessing the appearances that should be disclosed. The court was then adjourned to

December 1st, when Mr. Wotton, surgeon, of Great Portland street, having heard read the evidence that was given on the 24th November, being sworn, said, that he saw the deceased just after he was bled, on Saturday, the 21st November. He was breathing stertorously, the pupils were dilated, and the face was of a dark red, indicating great congestion; but he observed no symptom which then led him to conjecture that the patient had lost an excessive quantity of blood. In fact, though he had heard that he had been bled, he at once applied leeches at the base of the skull. He did not see how much blood had been taken by the lancet. He ordered the patient calomel, and directed mustard cataplasms to be applied to the feet. In the course of the day, the bandage, having been badly placed on the arm, came off, and some blood escaped in the bed. At his second visit, he found that there had, in the interval, been no evacuation from the bowels, and he therefore prescribed a powerful enema. The man remained unchanged for the better during that day, but on the next morning (Sunday) the pupils indicated improvement, and the face was more natural. No other change, however, was manifest. The breathing throughout was stertorous, but he presently sank, and died on the following day.

At the post-mortem examination, nothing unusual presented itself externally excepting that, at the vertex of the head, there was a long, ragged, contused wound of the scalp, the apparent effect of a fall, reaching the pericranium, with contusion around it, three inches in diameter. It was such a wound as would indicate a blow materially affecting the brain. On raising the skull, the membranes all presented an unusually vascular and gorged appearance, especially the arachnoid. On turning back the

\* On which occasion he was attended by the same practitioner, but without venesection. It may have been with reference to his suspicions on that occasion, that the practitioner imagined him to be drunk now, at nine, a. m. epileptically. This was the only fit, I ascertained, that his wife had in eighteen years (or longer) known him to have.

skull, and dividing the medulla oblongata, the base of the brain particularly showed the last-mentioned characters. It was more turgid than the membranes. Some coagulated blood was lying under the pons Varolii, where it would naturally have gravitated. The membranes encircling the cord in descending, the theca, were characterised by marks of chronic inflammation, with a thickening of the layers, which, presuming that the man had formerly suffered an epileptic attack, was undoubtedly the result thereof. The skull very thick; no denudation of it under the blow. The right cavity of the thorax contained twenty-four ounces of serum. The lung of that side was not diseased. No effusion on the left side; but the lung adherent there, along its whole extent to the pleura. The pulmonary vessels were not deficient of blood. The heart healthy; somewhat enlarged, but without dilatation; it contained a clot. The liver large and soft, indicating ale-tippling. All the other abdominal and pelvic viscera healthy. The blood-vessels of the body were full, *apparently to abundance*. No kind or degree of anaemia was any where discovered. The muscles were in no respect flaccid or soft, excepting so far as they might have become so *post-mortem*. They in no way indicated an excessive loss of blood during life. There was not bloodlessness in any part of the body. In every respect the frame was normal, as regarded fulness of blood, at the time of death. The young man and a medical friend of his were, both of them, as the coroner had desired, present at the examination, and were now in court. Witness considers that the vascularity of, and the extravasation of blood in the brain, and the concussion probably produced by the fall, were quite sufficient to account for the death.

It was unnecessary to carry the inquiry at the inquest farther. The complaint made against the practitioner that the venesection had produced the death, was in no respect sustained. It was too usual, the coroner observed, to bleed persons who fell, suddenly, insensible; but in the present case an excessive loss of blood, on whatever principle taken,—as the repletion of the body, *post-mortem*, according to the testimony of the surgeon, proved,—was, considering the extravasation of blood in the brain, the only thing that could give the man a chance of recovery; and he should recommend the jury to return a verdict to the effect, that he died a natural death from that extravasation. The jury at once acted upon this suggestion.

The only question asked by the practitioner at the inquest was this: Was the witness quite sure that the basin did not contain any fluid when the blood began to flow into it? He put it to the policeman after the possibility of that circumstance had been suggested by the court. To this inquiry all of the witnesses replied determinately in the negative.

The witness who fetched "the doctor," and

the constable of the court, on being asked what was the name of the practitioner, could not furnish it, "because there was no name over the door." His card was afterwards handed in. It was subsequently stated that the shop belonged to a member of the London College of Surgeons, who resided and practised in Poland street, and who had formerly established a branch shop in Gilbert street, since sold or closed; and that the custom was to place a gentleman in the shop to act for the principal as his medical representative, or agent.

*Case II.*—In the following case, the subjoined certificate of the cause of death was forwarded to the registrar of the district, by the surgeon who attended the patient during his illness of three days:—

"London, May 29, 1849.

"I hereby certify that Mr. G. P., of — street, died on Tuesday morning, at half past two, May 26, of an inflammatory gouty affection of the stomach, ending in mortification, being a natural death."

The coroner was informed of the death, and at the same time told that the patient certainly had been ill with a gouty affection of the stomach, but had, in reality, died from the effects of two inordinate bleedings. An inquest was held on the body, and the following statements elicited:—

May 26, 1840.—G. P., a lieutenant in the army, on half-pay, 56 years old, had been the subject of gout in the left foot and knee for five months, and for the last three days had kept his bed from "a bilious attack." On Sunday, the 24th of May, the patient having excessive and painful hiccough, his wife sent for the medical attendant of the family to see him, and by the direction of that gentleman leeches were applied to the patient's chest, as he had slight pain there when he hiccuped, and some medicine was sent for him. At eleven o'clock on Monday, the 25th, the patient had vomiting and purging, and the surgeon attended him again, and then bled him in the arm, as he lay in bed, taking away (according to the statement of the widow, at the inquest, which was held in Adam street, on Saturday, the 30th, the patient having died on Tuesday, the 26th,) "three parts of a large wash-hand basin full of blood, desiring Frances Atwood, *the servant*, to untie his arm, and bleed him again, to a pint, at four o'clock, desiring her not to lose her senses at the sight, but to work his fingers about at the bleeding." This the servant was on the point of doing when, as the blood began to flow, the surgeon came in, and took half as much blood in quantity as he had taken in the morning, the patient still *lying* in bed. Neither loss produced syncope. The patient, afraid that all was not right, asked the surgeon if there was "any danger," and was

consoled with the assurance that there was "none whatever." The wife repeated the question, and was answered that "there was always danger in a common cold." A mustard poultice to the chest, and afterwards a blister, were applied. The hiccough persisted up to this time, and, in fact, never left him until half an hour before he died. The surgeon ascribed it to "wind on the stomach." He became worse after the bleedings. The surgeon did not repeat his visit. Subsequently to the first bleeding he was weak and restless, and suddenly covered with a clammy cold sweat, and afterwards dropped into a doze. After the second loss of blood, "his eye became dull, and he stared and looked wild, and could not sleep." The bleedings somewhat subdued the hiccough each time. He was pale, and without fever under the attack for which the doctor came; he continually ate fluid arrow-root, and drank toast and water. On Monday morning he sat up on the side of the bed and shaved himself, between ten and eleven o'clock, with his feet resting on a writing-desk, the servant holding a glass before him. He complained of no pain, excepting on hiccoughing, throughout the last two days. He was never at all convulsed. On Monday night he became more composed, and frequently said he was better, but he gradually sank in strength; and on Tuesday morning, having at about two o'clock asked the servant to move his head on to the other pillow, died twenty minutes after. He was quite sensible to the last, and shortly before he ceased to breathe, looked round at the servant, and watched her round the room.

The foregoing evidence being supported, on her examination, by Frances Attwood, the coroner adjourned the inquest to Monday, in order to afford time for an examination of the body to be made.

*June 1st.*—On the reassembling of the jury the following evidence was given by Dr. Marshall Hall:

The examination was made on Saturday afternoon. The body was extremely fat. The mediastinum, the heart, and the intestines, were loaded with it. The brain was healthy. Each cavity of the thorax contained about eight ounces of fluid. The lungs were healthy, but adhered to the pericardium. The right ventricle was filled with a large, firm coagulum of fibrine. Such a coagulum was found in the aorta. The left ventricle was perfectly empty. The valves and the texture of the heart were natural, with the exception of the fatty condition of the heart, and a softness which was the result of decomposition. It was generally adherent to the pericardium. The viscera in the cavity of the abdomen were all healthy. The mucous membrane of the stomach was firm in every part, with a blush of redness at the large curvature, and one spot, of a deep slate colour, near the cardia. The liver was adherent to the diaphragm, and between these two there

were several firm bands. The abdominal and intercostal muscles were very florid. Many of the tissues were distended by air, the result of decomposition; by air the cerebral veins were filled, and the submucous tissue of the stomach was raised into numerous bladders, of the size, each, of half a pea. Dr. Hall added, that the period after death was much too late for making a satisfactory examination. The surgeon who had bled the deceased, and a friend, were present at it, and approved the account rendered of it by Dr. Hall, who, in reply to further questions of the court, said, that he found no inflammation of the stomach, nor mortification any where. He considered that the disease of the patient was a violent disorder of the stomach, and that either that, or the fatty condition of the heart, might have produced death, which the bleeding might have accelerated. In fact, he attributed death to those three causes combined.

Some notes, which were taken during an explanation of the surgeon at the inquest, respecting his attendance on the patient, furnish the following outline of his views and proceedings in the treatment:—First called to see him at four or five on Sunday morning; did not attend, but, from description of symptoms, sent an emetic. On a second summons, went, between eleven, A. M., and twelve, on that day. Vomiting a bilious matter; had hiccough, and was very uneasy. Said he had been a long time ill with gout, and had pain at the pit of the stomach. Uneasiness on pressure at that part. Ordered six leeches, and sent a mixture. *Monday:*—Symptoms aggravated; vomiting severe, still much pain on pressure. Regarding the case as severe inflammation of the stomach, prescribed bleeding, and in a wash-hand basin took twenty ounces. A very heavy man. Said he felt better after it. I said it might be necessary to take a little more, and that if prevented from coming at five in the afternoon, the servant might let a little flow at that time, such as a tea-cup full. In the north it is a common practice to instruct fishermen and others how to remove and take blood from the arm in cases of inflammation. Considering him to be extremely ill, went again at half past four, and found that the bandage had been removed, and the blood already flowing. Took only four ounces on this occasion. Would solemnly swear that. Said to the wife, "There is always danger in these cases, but I hope he will do well." Felt alarmed at his condition at the very first seeing him. He asked, "Is there danger?" Answered, "No," but whispered to Mrs. P., intimating the contrary. Told the son, also, that his father was very ill, and the tears came into his eyes. Never said he had wind in his stomach. He was enormously fat. Such attachments of the heart, liver, &c., are of themselves enough, in certain cases, to produce sudden death. The blood taken was buffy; never saw blood more buffed;

had it thrown away after showing its appearances in the room. At the examination of the body after death, saw no inflammation or mortification; no evidence of disease, in fact, so decided as I expected.

I cannot add the charge of the coroner, not having attended the present inquiry; nor, on the same account, can attempt to reconcile apparent contradictions in the evidence; but I have no doubt of the correctness of what I have here arranged, from notes which I preserved at the time on hearing that the inquest had been held. There only remains to be added, that the jury returned a verdict,—“Died from the combined effects of a fatty state of the heart, violent disorder of the stomach, and loss of blood.”—*London Lancet.*

*Case of Acute Hydrocephalus cured.* By Dr. BIERBAUM, of Dorsten.—A boy, whose head was disproportionately large, had from his birth frequently suffered from indigestion, and the greatest variety of children's diseases, which very much checked the development of his body. In April, 1837, when he had completed his second year, after being chilled in the feet, and taking indigestible food, he was attacked with a gastro-rheumatic fever; and hardly had he got over this, when, in consequence of taking cold again, one of the most destructive of children's diseases came on. The patient could not bear his playthings; became very peevish; complained of violent headache; could not hold up his head, but let it fall from one side to the other, and, when lying down, plunged it deep into the pillow. The temperature of the head was burning hot, while the extremities felt cold; the carotids pulsated strongly; the face was of a corpse-like paleness; the eyes red and intolerant of light; the nose and the external auditory meatus quite dry; the tongue clean and red; thirst great; appetite gone; bowels costive, urine scanty; the pulse frequent and hard. To this were added vomiting, terror, coma vigil, the greatest indifference, seizing the head with the hands, grinding of the teeth, respiration hardly audible or visible, and interrupted by sighs, and repeated exclamations that he was burning or falling. It was equally obvious that the disease was inflammation of the brain, and that the child was in great danger. Several leeches were applied to the mastoid process, a blister was put on the back of the neck, mercurial ointment was rubbed on the submaxillary glands, and two grains and a half of calomel were administered daily. On the seventh day of the treatment, the submaxillary glands were considerably swollen, the angle of the mouth was sore, and its cavity reddened, but there was no remarkable mercurial odour, and no commencement of salivation. On this day, 15 grains of calomel having now been taken, and two drachms of mercurial ointment rubbed on, a happy change took place, and gave great probability of a favorable ter-

mination. In the evening, the left cavity of the nose again secreted mucus, and afterwards the right cavity; the eyes (of which the left had been affected with œdema of the upper lid) again poured out tears when the child cried; and each external auditory meatus, but the left one more than the right, likewise began to secrete mucus. The return of these natural secretions, which deserve the greatest consideration, afforded the surest sign of the decrease of the morbid processes above mentioned. In order to aid these critical endeavours of nature, and give the last blow to the disease, Dr. Bierbaum used six more grains of calomel, and another drachm of mercurial ointment; so that, in all, twenty-one grains of calomel, and three drachms of mercurial ointment, had been employed. It was now time to discontinue the treatment, as was shown by the mercurial fever which came on, and which disappeared again in a few days. In this manner the child fortunately escaped its threatened fate; it recovered rapidly, and still enjoys the most perfect health.—*Ib., from Med. Zeit.*

*Dissection of case after the operation for Strabismus, by PRESCOTT G. HEWETT, M. D.—* George Clarke, at 30, was admitted into St. George's Hospital, under the care of Mr. Babington, on November 11, 1840, for an ulcer of the leg. He was also affected with strabismus of the left eye, which was drawn outwards, the deviation being very considerable.

On the 1st December, Mr. Babington divided the left external rectus. Rather more inflammation than usual followed, but this subsided in a few days without any particular treatment. At the time of the operation the success appeared to be complete, but after the subsidence of the subsequent inflammation, it was evident that the defect, though much diminished, was not entirely removed, the axes of the two eyes being not absolutely in the same direction. The difference, however, was very slight, and it gradually lessened, so as to be scarcely perceptible, when the patient was attacked with inflammation of the lungs, supervening on tubercles, and died on January 1st, 1841.

The eye and its appendages were removed, and carefully dissected. It was found that the external rectus had been completely divided, just at the part where it was beginning to be tendinous; that the muscle itself had retracted to the distance of about three quarters of an inch from its natural attachment, but that it still remained connected with the globe by a strong band of cellular tissue. This band was about three lines in width, and about six lines in length, and was attached to the ball of the eye about two lines behind the original insertion of the muscle, and such was its strength that it allowed of being pretty forcibly pulled upon without giving way. *Med. Gaz.*